Amendments to the Abstract:

ABSTRACT OF THE DISCLOSURE

There is the problem that when When voltage changes occur in the battery used as a power supply in a fuel injection system, the amount of fuel injection also changes and the required amount of fuel injected cannot be obtained. The present invention provides: a fuel injector by which the desired amount of fuel injection can be obtained even when power voltage changes occur; and a control of controlling the fuel injector. To provide To eliminate this problem, a fuel injector system is provided which has comprising a fuel injection valve with at least one coil, a power supply 403, a power supply voltage detection means 108 detector, and a control unit 402 for controlling the fuel injection valve; wherein. The control unit sets a reference value of a power supply voltage, is set and the above-mentioned fuel injection valve is controlled so as to obtain the required ampere-turns by reducing the resultant inductance of the coil when a power supply voltage detection value is less than the above-mentioned reference value, and increasing the resultant inductance of the coil is increased when the power voltage detection value is greater than the reference value.

[Selected Figure] Fig. 1

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